

Grade 3 Tilly's Tiles Math Rubric

2015-2016 NYC End-of-Year Performance Tasks

Instructions

- The following page(s) contain the rubric to be used for the scoring of the above-named NYC Performance Task.
- The rubric is intended to be used in conjunction with the Scoring Guide for this task, which provides annotated samples of student work scored against the rubric.
- If the above-named NYC Performance Task is being administered for evaluative purposes, the End-of-Year task may be administered by the regular classroom teacher but **may not be scored** by the regular classroom teacher.
- All student work should be completed in the task booklet. All student work in the task booklet should be scored, regardless of whether the student completed or attempted every question.
- All scores should be recorded on the appropriate answer sheet.
- For assistance with scanning answer sheets, see the MOSL Assessment Administration Handbook.

	4 Points	3 Points	2 Points	1 Point	0 Points
T1 Trait 1 3.MD.7b (Q1)			<ul style="list-style-type: none"> The student gives the correct answer, the 7 ft. \times 6 ft. room (Accept Room B as a correct answer.) ----- and ----- The student shows correct work, such as: $5 \times 8 = 40$, $6 \times 7 = 42$, $4 \times 9 = 36$, $3 \times 10 = 30$. 	<ul style="list-style-type: none"> The student gives the correct answer, the 7 ft. \times 6 ft. room and no work is shown. (Accept Room B as a correct answer.) ----- or ----- A correct process is started, but a computational error leads to an incorrect answer. 	<ul style="list-style-type: none"> Makes no attempt or answers incorrectly.
T2 Trait 2 3.OA.6 (Q2)			<ul style="list-style-type: none"> The student gives a correct answer, any combination of 10 groups of 4 such as 4ft. \times 1 ft. and 4ft. \times 9 ft., or other valid combinations. ----- and ----- The student shows correct work, such as: $4 \times 1 = 4$, $4 \times 9 = 36$, $36 + 4 = 40$, or other valid work. 	<ul style="list-style-type: none"> The student gives a correct answer and no work is shown. ----- or ----- A correct process is started, but a computational error leads to an incorrect answer. 	<ul style="list-style-type: none"> Makes no attempt or answers incorrectly.
T3 Trait 3 4.NBT.6 (Q3)			<ul style="list-style-type: none"> The student gives the correct answer, 9 rows. ----- and ----- The student writes a correct multiplication sentence, such as: $8 \times 9 = 72$. 	<ul style="list-style-type: none"> The student gives the correct answer, 9 rows, and no work is shown. ----- or ----- The student gives a division equation with correct work shown. ----- or ----- A correct process is started, but a computational error leads to an incorrect answer. 	<ul style="list-style-type: none"> Makes no attempt or answers incorrectly.
T4 Trait 4 3.MD.7b (Q4)			<ul style="list-style-type: none"> The student gives the correct answer, 72 tiles. ----- and ----- The student shows correct work, such as: $4 \times 3 = 12$, $10 \times 6 = 60$, $12 + 60 = 72$, or other valid work. 	<ul style="list-style-type: none"> The student gives the correct answer, 72 tiles, and no work is shown. ----- or ----- A correct process is started, but a computational error leads to an incorrect answer. 	<ul style="list-style-type: none"> Makes no attempt or answers incorrectly.
T5 Trait 5 3.NBT.3 (Q5)			<ul style="list-style-type: none"> The student gives the correct answer, 360 tiles. ----- and ----- The student shows correct work, such as: $4 \times 90 = 360$, or other valid work. 	<ul style="list-style-type: none"> The student gives the correct answer, 360 tiles, and no work is shown. ----- or ----- A correct process is started, but a computational error leads to an incorrect answer. 	<ul style="list-style-type: none"> Makes no attempt or answers incorrectly.
T6 Trait 6 3.OA.3 (Q6)			<ul style="list-style-type: none"> The student gives the correct answer, 9 houses. ----- and ----- The student shows correct work, such as: $6 \times 6 = 36$ and $36 \div 4 = 9$, or other valid work. 	<ul style="list-style-type: none"> The student gives the correct answer, 9 houses, and no work is shown. ----- or ----- A correct process is started, but a computational error leads to an incorrect answer. 	<ul style="list-style-type: none"> Makes no attempt or answers incorrectly.

	4 Points	3 Points	2 Points	1 Point	0 Points
<p>T7</p> <p>Trait 7 3.OA.8 (Q7)</p>			<ul style="list-style-type: none"> The student gives the correct answer, 32 more tiles. ----- and ----- The student uses estimation to explain how the answer was determined, such as: "In 6 weeks, Tilly makes 48 tiles, which is close to 50. If the total tiles she has to make is 80, then $80 - 50 = 30$ tiles she has left to make, which is close to 32." Or other valid estimation. 	<ul style="list-style-type: none"> The student gives the correct answer, 32 more tiles, and doesn't use estimation to explain the reasonableness of the answer. ----- or ----- The student gives an estimate and explains how it was determined without giving the correct answer. ----- or ----- A correct process for estimation is started, but a computational error leads to an incorrect answer. 	<ul style="list-style-type: none"> Makes no attempt or answers incorrectly.

Level 4 Exceeding Standards 13 - 14 points	Level 3 Meeting Standards 9 - 12 points	Level 2 Approaching Standards 4 - 8 points	Level 1 Attempting Standards 0 - 3 points
<p>Student demonstrates deep understanding of interpreting products of whole numbers and multiplying and dividing within 100 (all questions)¹. Student represents the problems using math sentences that model the situations (Q3, Q4). Student is able to clearly and efficiently calculate area (all questions) and combine different areas (Q2, Q4). Student is able to put to use all mathematical concepts upon which the task is designed (all questions).</p>	<p>Student demonstrates understanding of interpreting products of whole numbers and multiplying within 100. Student makes a good attempt at representing the problems, using math sentences that model the situation. Student completely calculates area and combines different areas. Student attempts to put to use all mathematical concepts upon which the task is designed.</p>	<p>Student is only able to be successful on part of this performance task. Student is likely to calculate quantities in some but not all of the parts of the task. Student may struggle to represent the constraints of the problem with correct number sentences, and/or words. The explanation of how to calculate area and combine different areas may not be clear. Student may have trouble making sense of the math in most of the situations.</p>	<p>Student demonstrates minimal success on the task. There are some attempts, but complete work is not in evidence. Student is likely to calculate quantities in only one or two parts of the task. Student is unable to represent the constraints of the problems using any procedure or strategy. Student struggles to complete the work in most parts of the task.</p>
<p>Student's response meets the demands of nearly all of the tasks as defined by the Common Core standards, with few or no errors. The solution shows a deep understanding of the problem (all questions). Student's responses address all of the mathematical components in the tasks. Student uses efficient strategies that lead directly to a solution (all work shown for all questions). Student verifies the solution and/or evaluates the reasonableness of the solution (Q7). The communication is clear (all work shown for all questions). All of the steps are included so that the reader does not need to infer how and why decisions are made (all work shown for all questions). Mathematical representation is actively used to communicate the solution to the problem. There is precise and appropriate use of mathematical terminology and notation (all work shown for all questions). Student often discerns patterns or structures and makes connections between quantities and representations.</p>	<p>Student's response meets the demands of nearly all of the tasks as defined by the Common Core standards, with few errors. For most of the task, student's response shows broad understanding of the problem and the major concepts necessary for a solution. Student explains the problem and describes the solution path. Effective mathematical reasoning is used. There is a sufficiently clear communication to be able to follow reasoning. There is appropriate use of accurate mathematical representation. There is effective use of mathematical terminology and notation. Student makes sense of quantities and their relationships in the problem situations. Student might notice patterns or structures and make connections between quantities and representations.</p>	<p>Student's response shows some of the elements of performance that the tasks demand and some signs of a coherent approach to problem solving as defined by the Common Core standards. Student uses a strategy that is partially useful, leading some of the way to a solution. The solution is not complete. The solution addresses some but not all of the mathematical components in the task. Some evidence of mathematical reasoning is evident. Some parts of the work may be correct. There is an incomplete explanation, or it may not be clearly presented. There is some use of appropriate mathematical representation. There is some use of mathematical terminology and notation that is appropriate to the problem. Student may recognize some patterns or structures, but does not yet generalize or use them to solve the problem.</p>	<p>Student's response shows a few of the elements of performance that the tasks demand as defined by the Common Core standards. However, the misconceptions are substantial and require further instruction. There is no solution, or the solution has no relationship to the task. There is hardly any evidence of a strategy or procedure. There is hardly any evidence of mathematical reasoning. There are many errors in mathematical procedures. Lack of communication makes it difficult to follow student's reasoning, or it is unrelated to the problem. There is no use, or inappropriate use, of mathematical representation, mathematical terminology, and notation. Student is not yet recognizing patterns or the structure of the problem situation.</p>

¹This notation identifies the questions that relate to the holistic rubric criteria.